CLAIMS

1. A method for implementing an address pool containing a plurality of unique addresses adapted for assignment to an aggregate of a server in a computer network, the method comprising the steps of:

collecting addresses originally assigned to physical interfaces of a network adapter of the server;

modifying each originally assigned address by asserting a predetermined bit of the address;

organizing the modified addresses as the address pool of unique addresses for the aggregate; and

assigning a selected modified address from the pool as the unique address for the aggregate.

2. The method of Claim 1 wherein each address is a medium access control (MAC) address.

3. The method of Claim 2 wherein the predetermined bit is bit 46 of the MAC address.

4. The method of Claim 1 wherein the step of collecting comprises the step of collecting addresses from a predetermined data structure associated with each interface.

5. The method of Claim 4 wherein the predetermined data structure describes the associated interface.

6. The method of Claim 5 wherein contents of the predetermined data structure comprises a type of interface and a medium access control (MAC) address assigned to the interface.

1   7. The method of Claim 1 wherein the step of assigning comprises the step of loading a

2   programmable device and a predetermined data structure associated with each interface

3   with the selected modified address.

1   8. The method of Claim 7 wherein the programmable device is an application specific

2   integrated circuit.

1   9. The method of Claim 1 further comprising the step of returning the selected modified

2   address to the address pool upon destroying the aggregate.

1   10. A system for implementing a pool containing a plurality of modified addresses

2   adapted for assignment to an aggregate, the system:

3   a processor;

4   a network adapter coupled to the processor, the network adapter including physi-

5   cal interfaces connected to links of the aggregate;

6   an operating system executable by the processor, the operating system comprising

7   a virtual interface process configured to collect addresses originally assigned to the

8   physical interfaces, the virtual interface process modifying each originally assigned ad-

9   dress by asserting a predetermined bit of the address; and

10   a memory coupled to the processor, the memory organized as a pool of modified

11   addresses,

12   wherein the virtual interface process assigns a selected modified address from the

13   pool as a modified address for the aggregate.

1   11. Apparatus for implementing a pool containing a plurality of unique addresses adapted

2   for assignment to an aggregate of a server, the apparatus comprising:

3   means for collecting addresses originally assigned to physical interfaces of a net-

4   work adapter of the server;

5   means for modifying each originally assigned address by asserting a predeter-

6   mined bit of the address;

7   means for organizing the modified addresses as the address pool of unique ad-

8   dresses for the aggregate; and

9   means for assigning a selected modified address from the pool as the unique ad-

10   dress for the aggregate.

1   12. The apparatus of Claim 11 wherein each address is a medium access control (MAC)

2   address.

1   13. The apparatus of Claim 12 wherein the predetermined bit is bit 46 of the MAC ad-

2   dress.

1   14. The apparatus of Claim 11 wherein the means for collecting comprises means for

2   collecting addresses from a predetermined data structure associated with each interface.

1   15. The apparatus for Claim 11 further comprising means for returning the selected

2   modified address to the pool upon destroying the aggregate.

1   16. A computer readable medium containing executable program instructions for imple-

2   menting a pool containing a plurality of unique addresses adapted for assignment to an

3   aggregate of a server, the executable program instructions comprising program instruc-

4   tions for:

5   collecting addresses originally assigned to physical interfaces of a network

6   adapter of the server;

7   modifying each originally assigned address by asserting a predetermined bit of the

8   address;

9   organizing the modified addresses as the address pool of unique addresses for the

10   aggregate; and

11   assigning a selected modified address from the pool as the unique address for the

12   aggregate.

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1   17. The computer readable medium of Claim 16 wherein each address is a medium ac-

2   cess control (MAC) address.

1   18. The computer readable medium of Claim 17 wherein the predetermined bit is bit 46

2   of the MAC address.

1   19. The computer readable medium of Claim 16 wherein the program instruction for

2   collecting comprises a program instruction for collecting addresses from a predetermined

3   data structure associated with each interface.

1   20. The computer readable medium of Claim 16 further comprising program instructions

2   for returning the selected modified address to the address pool upon destroying the ag-

3   gregate.